INTERNATIONAL SEARCH REPORT

International application No. PCT/JP2005/008157

A. CLASSIFICATION OF SUBJECT MATTER

Int.Cl⁷ G11B11/10, 5/596, 5/65, 5/71, 5/738, 5/82, 5/84, 11/105, 21/10

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

Int.Cl⁷ G11B11/10, 5/596, 5/65, 5/71, 5/738, 5/82, 5/84, 11/105, 21/10

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Jitsuyo Shinan Koho 1922-1996 Jitsuyo Shinan Toroku Koho 1996-2005 Kokai Jitsuyo Shinan Koho 1971-2005 Toroku Jitsuyo Shinan Koho 1994-2005

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	JP 8-7355 A (Hitachi, Ltd.),	1-4,9,14,18,
Y	12 January, 1996 (12.01.96), Full text; all drawings (Family: none)	23,25 7-8,11-13, 15-17,19-22,
A		24,26-28 5-6,10
х	JP 1-229439 A (Toppan Printing Co., Ltd.),	1-4,9,11
Y	13 September, 1989 (13.09.89), Claims; page 3, lower left column, lines 12 to 20; Fig. 9 (Family: none)	10
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	Further documents are listed in the continuation of Box C.		See patent family annex.
* *A"	Special categories of cited documents: document defining the general state of the art which is not considered to be of particular relevance	"T"	later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
E"	earlier application or patent but published on or after the international filing date	"X"	document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive
*O"	document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) document referring to an oral disclosure, use, exhibition or other means	«Y»	document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination

Po document published prior to the international filing date but later than the priority date claimed being obvious to a person skilled in the art document member of the same patent family

Date of the actual completion of the international search
23 August, 2005 (23.08.05)

Date of mailing of the international search report
13 September, 2005 (13.09.05)

Name and mailing address of the ISA/
Japanese Patent Office

| 17....: 12. NT.

Authorized officer

INTERNATIONAL SEARCH REPORT

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PCT/JP2005/008157

). DOCUMENTS CONSIDERED TO BE RELEVANT	es Relevant to claim No.
Category* Y	Citation of document, with indication, where appropriate, of the relevant passage JP 6-290496 A (Canon Inc.), 18 October, 1994 (18.10.94), Full text; all drawings & US 6399174 B1 & EP 618572 A2 & DE 69430883 T	10,26-28
Y	JP 8-203058 A (Hitachi, Ltd.), 09 August, 1996 (09.08.96), Full text; all drawings (Family: none)	11-13
Y	JP 2001-176.004 A (Hitachi Maxell, Ltd.), 29 June, 2001 (29.06.01), Full text; all drawings (Family: none)	26-28
X	<pre>JP 6-176405 A (Sony Corp.), 24 June, 1994 (24.06.94), Full text; Fig. 1 (Family: none)</pre>	1-3
X	<pre>JP 5-266523 A (Seiko Epson Corp.), 15 October, 1993 (15.10.93), Full text; Fig. 1 (Family: none)</pre>	1-3
A	<pre>JP 11-213420 A (Nikon Corp.), 06 August, 1999 (06.08.99), Full text; Fig. 1 (Family: none)</pre>	26-28